

REMARKS

Claims 1-2 and 5-17 were examined by the Office, and in the Office Action of October 30, 2008 all claims are rejected. With this response claims 1 and 17 are amended. Applicant respectfully submits that the amendments to the claims are supported by the specification as originally filed. Applicant respectfully requests reconsideration and withdrawal of the rejections in view of the following discussion.

Claim Rejections Under § 103

In section 4, on page 2 of the Office Action, claims 1-2, 5-6 and 10-17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Osano (U.S. Patent No. 6,961,591) in view of Suzuki et al. (U.S. Patent No. 6,430,217), and in further view of Sawada (U.S. Patent No. 4,369,521). Applicant respectfully submits that claim 1 is not disclosed or suggested by the cited references, alone or in combination, because the cited references fail to disclose or suggest all of the limitations recited in claim 1. Applicant respectfully submits that claim 1 is not disclosed or suggested by the cited references, because the cited references at least fail to disclose or suggest an audio connector providing an antenna function through a connected audio reproduction component, where the audio connector comprises at least a first contact and the first contact is connected to ground and to an antenna input of a radio receiver, as recited in claim 1.

Applicant respectfully submits that Osano fails to disclose or suggest that the first contact is connected to ground and to an antenna input of said radio receiver, as recited in claim 1. The Office asserts that a “hand held telephone” corresponds to the “radio receiver” recited in claim 1. However, in Osano the first contact is not connected to an antenna input, but to an earphone input. See Osano column 10, lines. 47-49 (An annular unit 56 is mounted to an earphone terminal 22 shown in FIG. 8A through the telephone set main body unit 11 so as to insert an earphone plug with its tetrode structure). The antenna of the hand held telephone of Osano is a separate component having no functional relation to the earphone jack. As the phone of Osano already comprises a separate antenna, there is no reason to provide an additional antenna. Particularly the earphone jack of Osano cannot provide the antenna function as that of the present invention. In order to further clarify this distinction, claim 1 is amended to recite that the audio connector provides an antenna function through a connected audio reproduction component.

Furthermore, in contrast to the present invention, Osano is mainly focussed to the concept of ambient noise level and accordingly adjusting the signal levels. Referring to the figures there is no information available that is directly related to signal bandwidth. In fact, under the field of invention (page 1, paragraph 1 of specification), it is pointed out that Osano is related to music playback. Osano tries to overcome the problem that “the sensitivity of the ambient sound is lowered as compared with the single-ear mount type” when using two-ear headphones. See Osano column 2, lines 45-61. This has nothing to do with using an audio connector for the antenna function as the present invention. Furthermore, claim 1 of Osano only mentions ambient sound and signal adjustment which is all related to sound levels. Therefore, Osano is concerned with adjustments concerning the audio quality in a mobile device. In contrast the present invention is concerned with the improvement of RF reception. These are apparently completely different technical applications or areas.

In addition, Suzuki also fails to disclose or suggest that said first contact is connected to ground and to an antenna input of said radio receiver. The antenna of the wireless transceiver apparatus of Suzuki is a separate component having no functional relation to the earphone jack. See Suzuki Fig. 2. In Figure 2 antenna 40 is clearly located on the left of the device, whereas headphone 61 is clearly located at the right of the device, with no functional relationship between them. While Suzuki mentions the use of a band pass filter, the band pass filter is connected with the microphone jack, i.e. an audio recording component, but not to an audio connector to connect to an audio reproduction component. See Suzuki Fig. 2. Instead a low pass filter is connected to the headphone. Similar to Osano this filter is used solely in the audio processing section of the respective device, and has nothing to do with the RF reception part of the device, as can easily be seen from the circuit depicted in Figure 2 of Suzuki.

Furthermore, it is the object of Suzuki to prevent or minimize RF pickup by the headphone cable. In other words, Suzuki intends to prevent that the headphone cable acts as an antenna. Therefore it is apparent that Suzuki does not disclose that the audio connector provides an antenna function. Accordingly, Suzuki cannot make up for the missing features in Osano as mentioned above. Furthermore, Sawada also fails to make up for the deficiencies in the teachings of Osano and Suzuki identified above. Therefore, for at least the reasons discussed above, claim 1 is not disclosed or suggested by the cited references.

Independent claim 17 is amended to contain limitations similar to those recited in claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claim 17 is not disclosed or suggested by the cited references.

The dependent claims rejected above, and not cancelled, are not disclosed or suggested by the cited references at least in view of their dependencies.

In section 5, on page 7 of the Office Action, claim 7 is rejected under 35 U.S.C. § 103(a) as unpatentable over Osano in view of Suzuki Sawada, and in further view of well known Prior Art. Applicant respectfully submits that claim 7 ultimately depends from independent claim 1, and therefore is not disclosed or suggested by the cited references at least in view of its dependency.

In section 6, on page 8 of the Office Action, claims 8-9 are rejected under 35 U.S.C. § 103(a) as unpatentable over Osano in view of Suzuki and Sawada, and in further view of Ito (U.S. Patent No. 6,203,344). Claims 8 and 9 ultimately depend from independent claim 1, and therefore application respectfully submits that claims 8 and 9 are not disclosed or suggested by the cited references at least in view of their dependencies.

Conclusion

The rejections of the Office Action having been shown to be inapplicable, withdrawal thereof is requested, and passage to issue of the present application is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge Deposit Account No. 23-0442 for any fee deficiency required to submit this response.

Respectfully submitted,

Date: 26 February 2009

Keith R. Obert
Keith R. Obert
Attorney for Applicant
Registration No. 58,051

WARE, FRESSOLA, VAN DER SLUYS
& ADOLPHSON LLP
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
Customer No. 004955